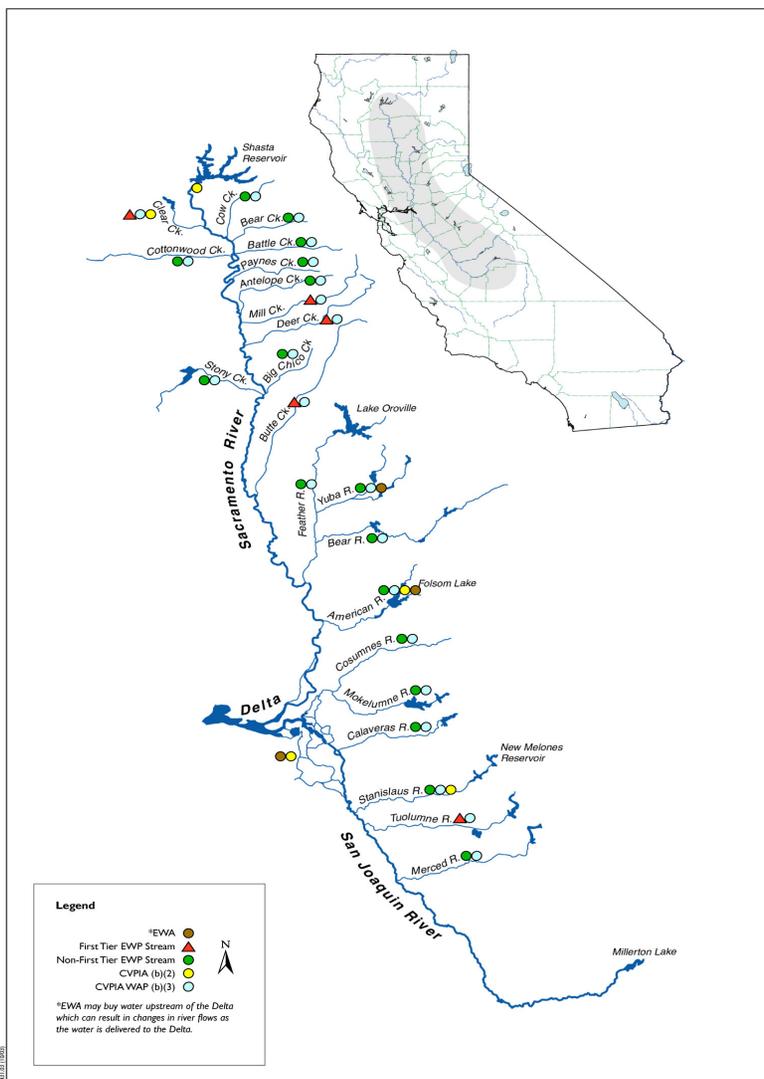


Status of San Joaquin Basin Fall-run Chinook



State Water Resources
Control Board Workshop,
September 17, 2008

Roger Guinee

USFWS, Region 8, Sacramento

Status of San Joaquin Basin Fall-run Chinook

- Interior commends CDFG for developing the salmon model and views it as a tool that will help all parties improve our understanding of the role of spring flows in the San Joaquin Basin and Chinook salmon survival.
- Interior is concerned about the continued decline of San Joaquin Basin fall-run Chinook salmon.
- In-river adult escapement into the three main San Joaquin tributaries (Stanislaus, Tuolumne, and Merced Rivers) has declined since 2000 when an estimated 37,500 adult Chinook returned to spawn.
- Last year (fall 2007) fewer than 1,000 adult Chinook salmon returned, which represents a 97% decrease in the last seven years.
- Ocean conditions have likely been a factor in the 2007 decline, however ongoing long-term studies indicate that lower instream flows in the San Joaquin system are related to low numbers of salmon returning to spawn.

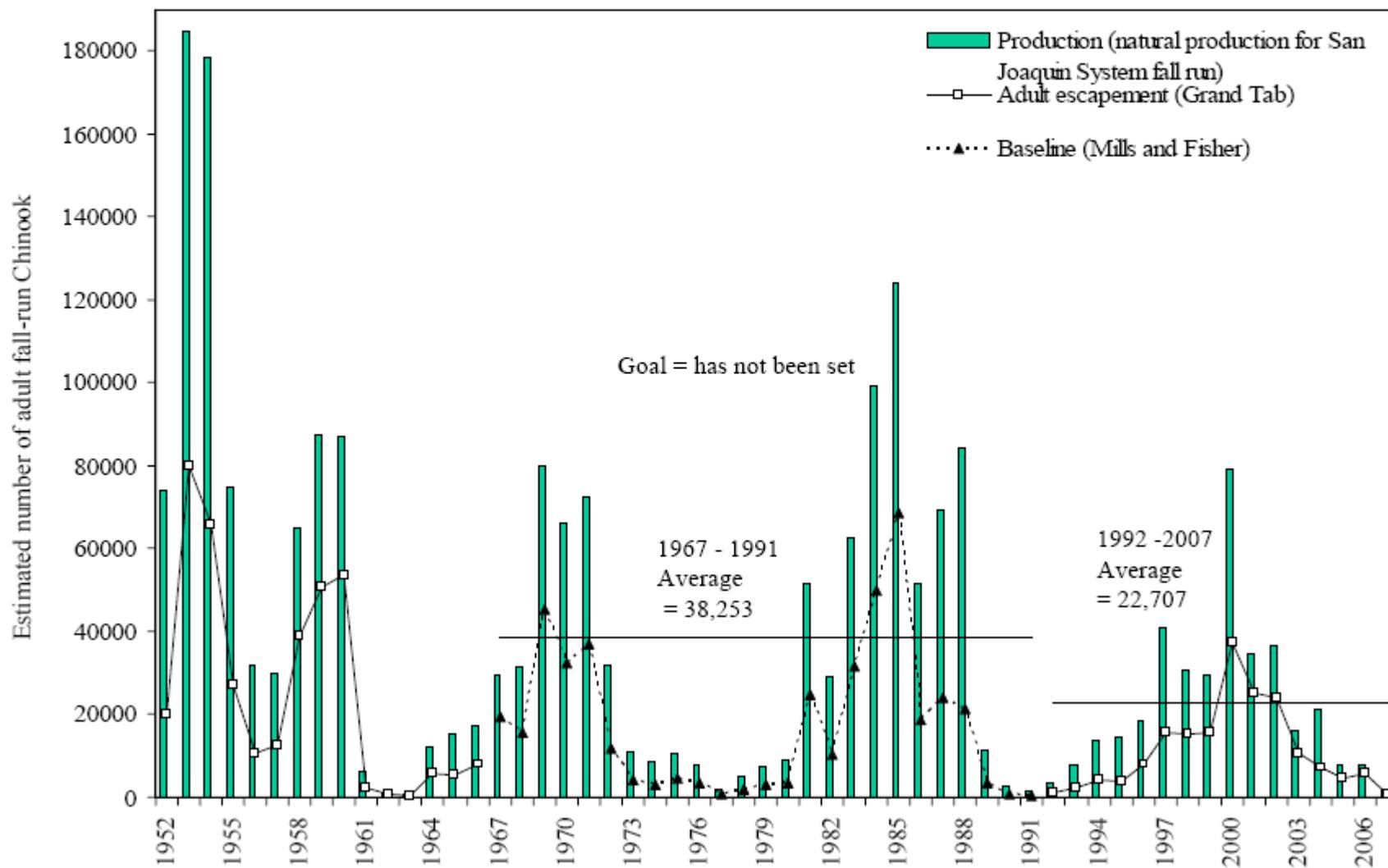


Figure 37. Estimated yearly natural production, and in river escapements of San Joaquin System adult fall-run Chinook salmon. The San Joaquin System is the sum of the Stanislaus, Tuolumne, and Merced Rivers. 1952 - 1966, and 1992 - 2006 numbers

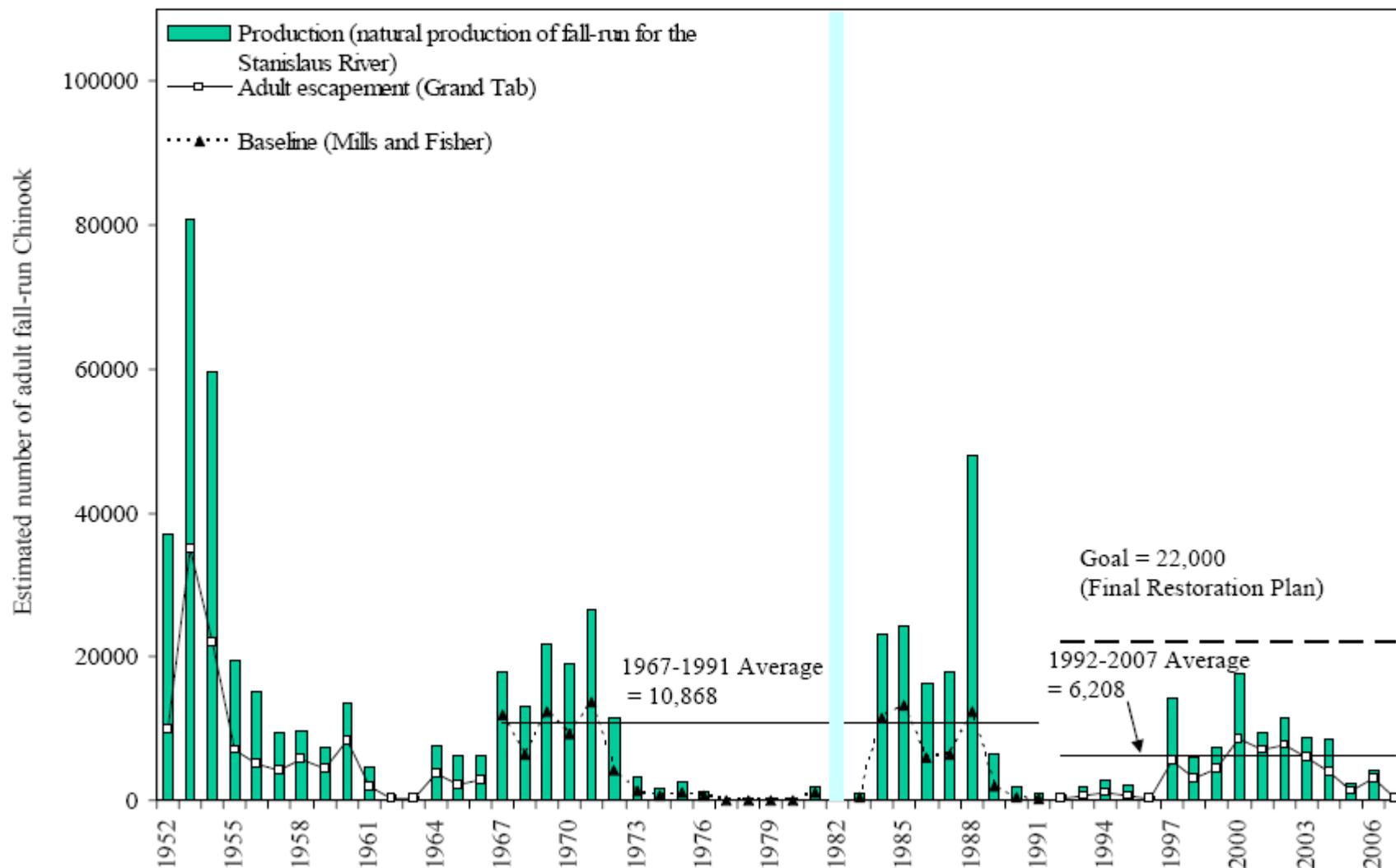


Figure 34. Estimated yearly natural production, and in river escapements of Stanislaus River adult fall-run Chinook salmon. 1952 – 1966, and 1992 - 2007 numbers are from CDFG Grand Tab (March 1, 2008). Baseline numbers (1967 - 1991) are from Mills and Fisher (CDFG, 1994). = data was not available for 1982.

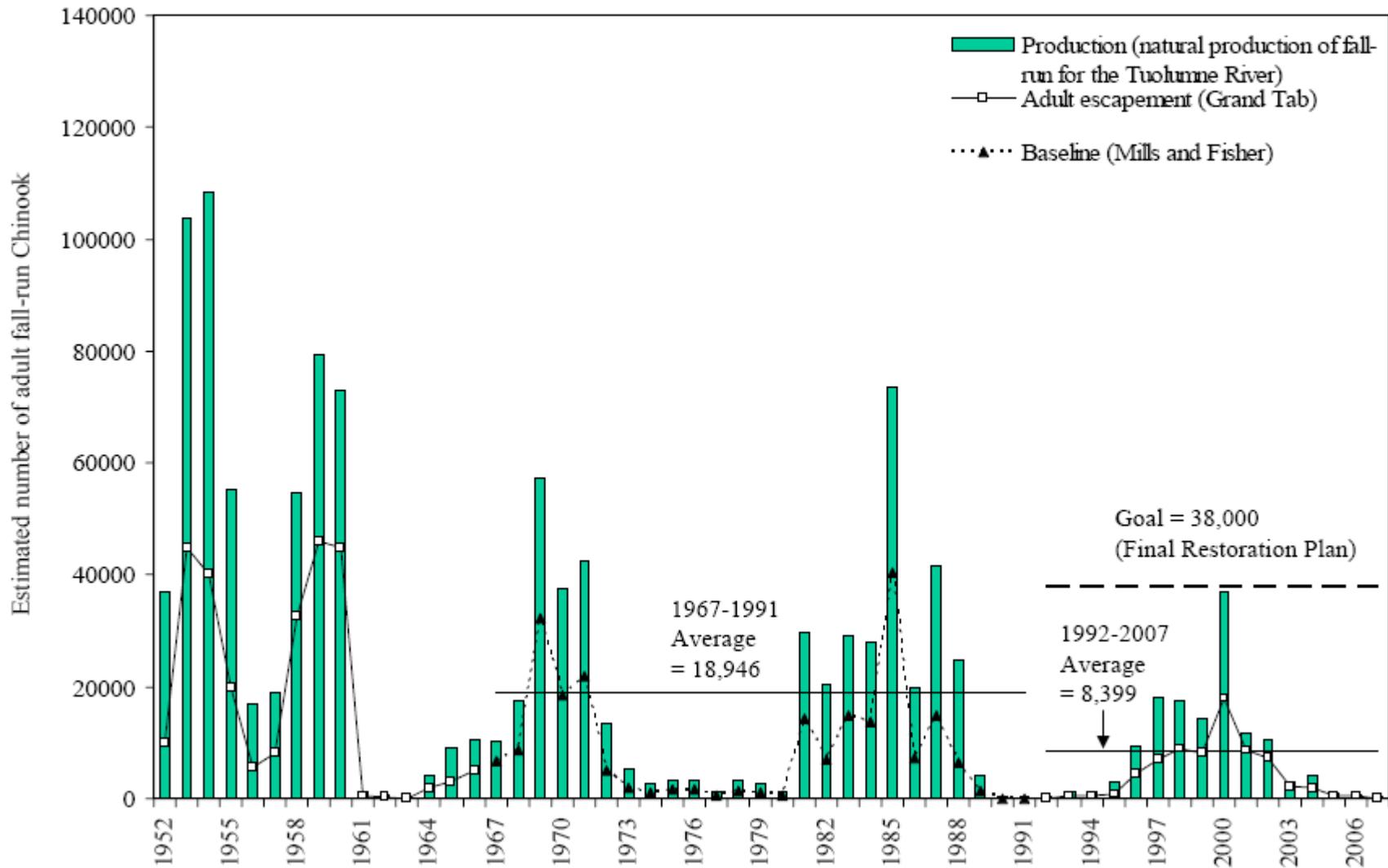


Figure 35. Estimated yearly natural production, and in river escapements of Tuolumne River adult fall-run Chinook salmon. 1952 - 1966, and 1992 - 2007 numbers are from CDFG Grand Tab (March 1, 2008). Baseline numbers (1967 - 1991) are from Mills and Fisher (CDFG, 1994).

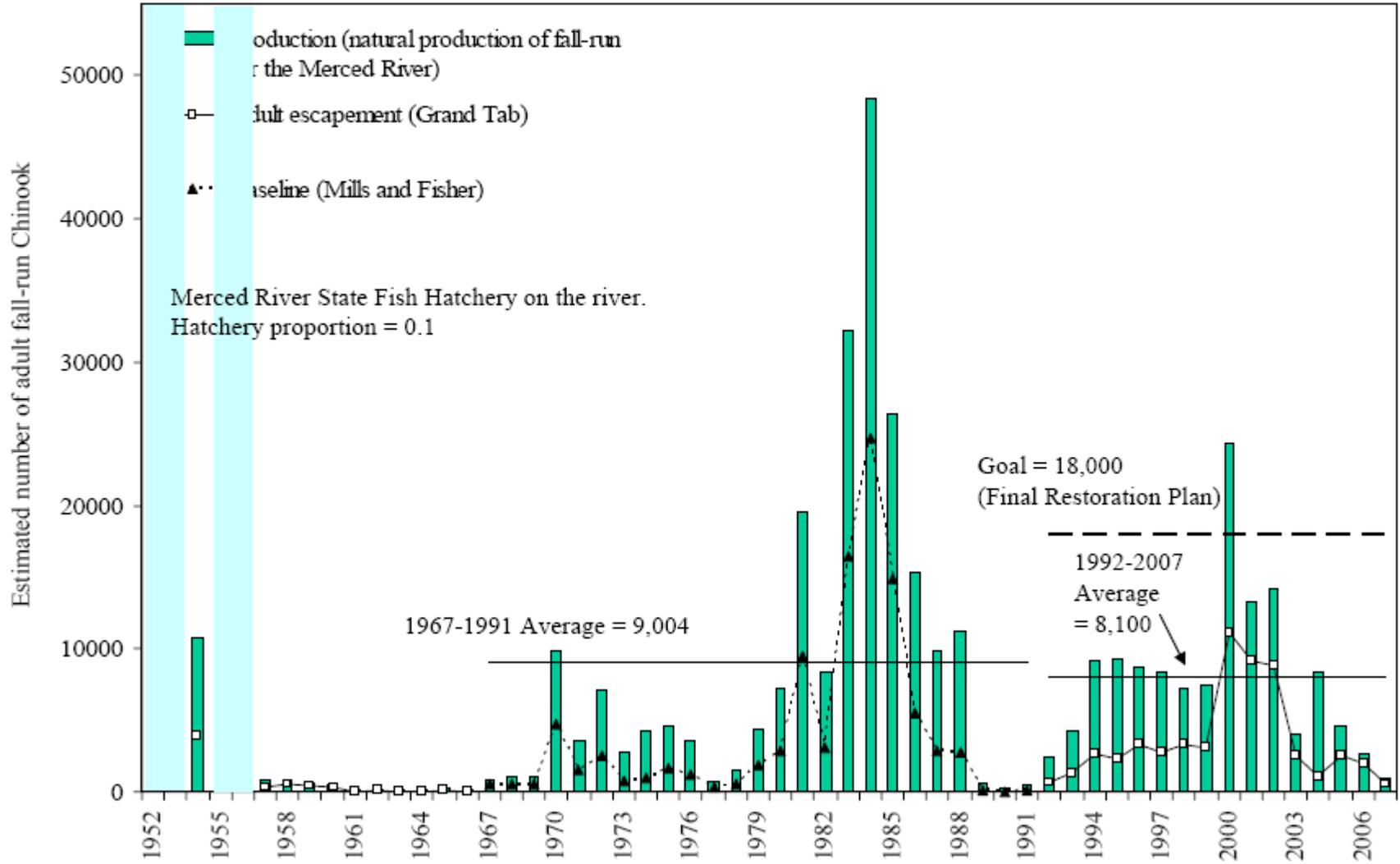


Figure 36. Estimated yearly natural production, and in river escapements of Merced River adult fall-run Chinook salmon. 1952 - 1966, and 1992 - 2007 numbers are from CDFG Grand Tab (March 1, 2008). □ = data was not available for 1952 - 1953, and 1955 - 1956. Baseline numbers (1967 - 1991) are from Mills and Fisher (CDFG, 1994).

Survival of Chinook salmon smolts in the Sacramento-San Joaquin Delta and Pacific Ocean. Baker and Morhardt, 2001.

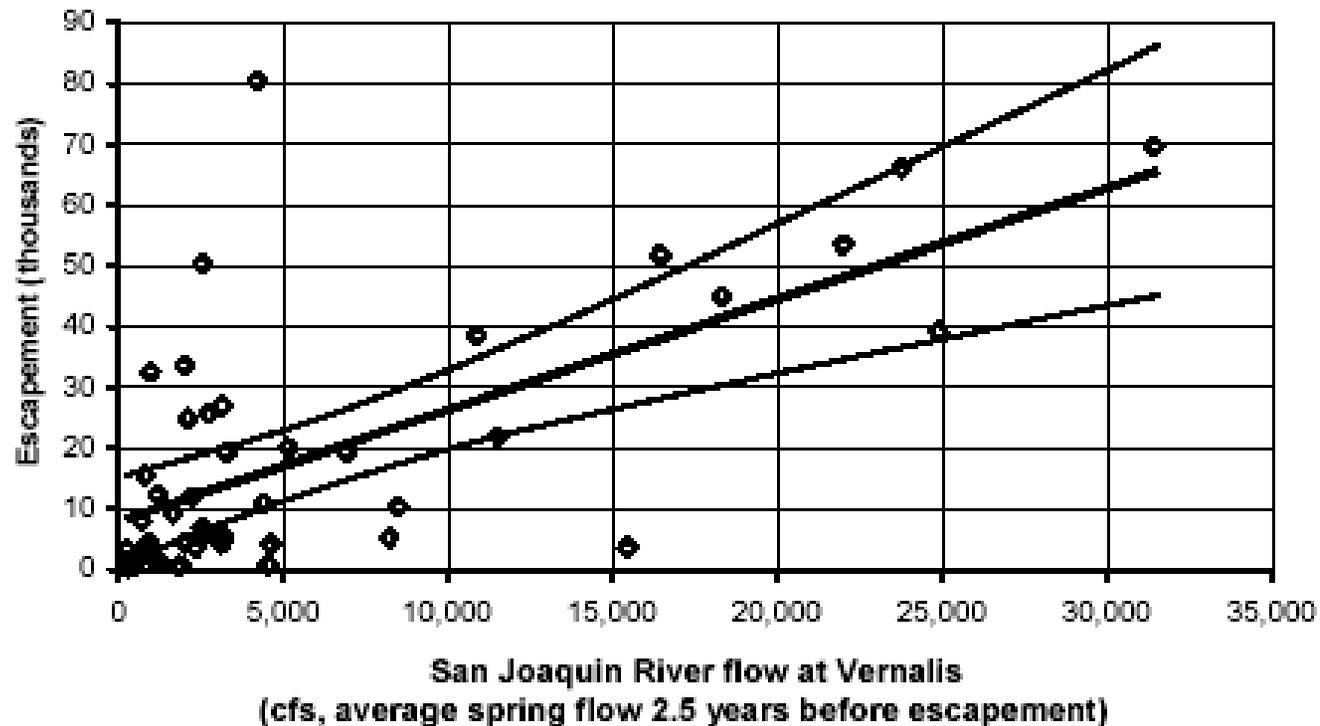


Figure 11 Total escapement to San Joaquin tributaries, 1951 through 1996, and spring flow in the San Joaquin River at Vernalis 2.5 years earlier. Fitted regression line and envelope of 95% confidence region for fitted line are shown.

San Joaquin Fall-run Escapement (in-river)

(data from draft GrandTab 03-01-08)

